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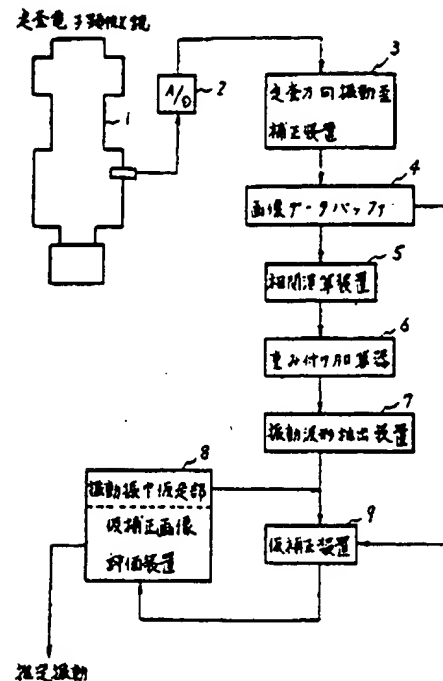
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APPLICANT : HITACHI LTD;

INVENTOR : FURUYA HISAHIRO;

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TITLE : SCANNING VIBRATION ESTIMATING
APPARATUS FOR SCANNING TYPE
ELECTRON MICROSCOPE



ABSTRACT : PURPOSE: To decide mechanically a band which includes a real vibration component so as to improve processing efficiency and operatability by applying a specific process to the wave information of an image pattern including bad effects.

CONSTITUTION: A scanned image signal from a scanning electron microscope 1 is converted to a digital signal by an A/D convertor 2 to pass through a scanning direction-vibratory distortion compensating apparatus 3 and to be stored in an image data buffer 4 in a condition with no vibratory distortion in a scanning direction. In the separating and sampling process for a real vibration component from wave information of an image pattern in the state of including bad effects, band pass filtering process is applied to the wave information prior to differentiation with a neighborhood of a frequency for indicating the maximum value of power spectrum of a differentiated value of the wave information assigned to a band applicable thereto. By removing a low frequency band, the maximum and remarkable power peak in its vibration frequency may be displayed. Accordingly, a band including a real vibration component can be decided easily and mechanically so that the apparatus in the caption can be obtained with excellent process efficiency operatability.

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